Home-based work, time endowments, and subjective well-being: Gender differences in the United Kingdom

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Home-based work, time endowments, and subjective well-being: Gender differences in the United Kingdom*

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Abstract

The confinement caused by Covid-19, and the associated promotion of telework to reduce exposure of workers to the disease, have clear implications for worker daily behaviors and well-being. This paper empirically explores the differences between commuters' and teleworkers' time allocations during their workdays, and the instant enjoyment experienced while doing such activities, with a focus on gender differences. Using detailed information from the UK Time Use Survey for the years 2014-2015, the results show a statistically significant cut in female and male paid work time associated with teleworking. On the other hand, teleworkers spend more time than commuters in unpaid work and leisure activities. The results also reveal a cut in women's experienced enjoyment while doing telework, while male teleworkers enjoy their leisure more than do commuters. These results suggest that confinement policies promoting teleworking may impact not only worker time allocations, but also individual well-being, and such an impact may differ between men and women, leading to intrahousehold imbalances.

Keywords: Gender difference; telework; time use; subjective well-being; UKTUS

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1. Introduction

The onset of the COVID-19 pandemic has led to confinements of the population worldwide, which has clear implications for worker's daily behavior. Many have been forced to work from home (i.e., to telework), changing their behavior in comparison to the pre-pandemic period. A clear consequence of these changes is that the time spent with spouses, children, and/or other family members will have increased, including working while other members of the family are present. These changes may have led to changes in the well-being of workers in their activities, since activities done in the presence of others are seen as being more beneficial in comparison with activities done alone (Kahneman et al., 2004; Kahneman and Krueger, 2006; Krueger, 2007: Sevilla et al., 2012; Gimenez-Nadal and Molina, 2015). It is unclear whether confinements have increased intrahousehold inequality in well-being, as women and men may have different preferences for time use, work schedules, togetherness, and other factors that affect individual well-being. In this context, it is important to study the potential gender differences in terms of teleworking, the timing of daily activities, and satisfaction, which may be of special interest in understanding the impact of confinement on female and male workers' wellbeing.

Existing research has analyzed the impact of confinements during the Covid-19 pandemic on workers. For instance, Hamermesh (2020) analyzed who individuals spend their time with under a simulated lockdown, using US data from years 2012-2013, showing that married individuals' time with the spouse increased during a lockdown, resulting in an increase of the couple's overall life satisfaction, while the opposite is the case for singles. Gimenez-Nadal et al. (2020a) ran a similar analysis in the UK, studying the instant utility (i.e., experienced well-being) of individuals, finding differential results between women and men, and also differences between the US and the UK. On the other hand, Del Boca et al. (2020) analyzed a dataset collected in April 2020, in Italy, to study how Covid-19 is associated with changes in couples' working arrangements (market work and housework). Their results reveal that women spent more time doing housework during the Covid-19 lockdown, regardless of the couples' paid work arrangements, while husbands' unpaid work depends on wives' paid work arrangements.

Thus, the existing literature on the impact of confinements (as a consequence of the Covid-19 lockdown) on worker's time allocations suggests the existence of an asymmetric effect on women and men, which may be key in determining how confinements have affected household well-being. In this context, we study how telework, which has been actively promoted during

confinements, is associated with female and male workers' time allocations and well-being. Other authors analyzing the impact of Covid-19 on workers are, for instance, Alon et al. (2020), Biroli et al. (2020), Gershuny et al. (2020), and Mangiavacchi et al. (2020).

Telework, or home-based work, has previously been analyzed in different contexts and disciplines, although the assumed positive impacts of teleworking, in terms of work-family flexibility, reduced pollution and congestion, and increased worker productivity are not robustly documented in the existing empirical literature (Edwards and Field-Hendrey, 2002; Safirova, 2002; Rhee, 2008; Bloom et al., 2015; Dockery and Bawa, 2018). For instance, telework has often been found to reduce work-family conflicts, but some authors have also found negative outcomes in terms of decreased work inclusion and co-worker satisfaction (Morganson et al., 2010; Golden and Fromen, 2011). Furthermore, what little applied research analyzing the impact of telework on individual time allocation decisions there is – and analysis of impacts on worker well-being - shows only mixed results. Some authors have found that teleworkers work longer hours than commuters (Peters and van der Lippe, 2007; Golden, 2008), while other authors have concluded the opposite (Wight and Raley, 2009; Gimenez-Nadal et al., 2020b). Therefore, it is unclear whether the systematic promotion of telework is beneficial for workers' well-being, even in a pandemic situation requiring lockdowns.

Within this framework, we empirically explore worker's time allocation decisions during their workdays, with a focus on the differences between commuters and teleworkers, using detailed time use diaries from the UK Time Use Survey for the years 2014-2015. The results show a cut in paid work time associated with telework, in line with prior studies analyzing market work time during a pandemic situation (Hamermesh, 2020). Specifically, net of observable characteristics, the average male (female) who works from home devotes about 34.3% (50.6%) less time to paid work activities, relative to the individual who commutes to/from work. These differences correspond to cuts in paid work time per week of about 221 minutes for female, and 106.5 minutes for male teleworkers, compared to commuters. Second, telework is associated with an increase in unpaid work and leisure time. Male (female) teleworkers devote about 63.3% (46.5%) more time to housework and unpaid work activities, and 20.2% (26.2%) more time to leisure, relative to male (female) commuters.

We also analyze whether being a teleworker is associated with different experienced utility during the day for workers. To that end, we assess the enjoyment experienced during episodes

of paid work, unpaid work, and leisure, focusing on differences in enjoyment between commuters and teleworkers. We observe that female teleworkers enjoy their paid work episodes less than do female commuters, but they also enjoy their unpaid work episodes less. The results show no differences between male teleworkers and commuters in the enjoyment experienced while doing paid and unpaid work activities, although male teleworkers enjoy their leisure episodes more than do commuters.

The contributions of the paper are, then, threefold. First, we compare the time allocation decisions of teleworkers and commuters, with a focus on paid work time, unpaid work time, and leisure time. The results may help planners and policy makers to anticipate the future impacts of promoting telework as part of work-family and self-employment policies designed during lockdown situations (Campaña et al., 2020; Molina, 2020a; Molina, 2020b) Second, we focus not only on paid work activities, or on aggregate life satisfaction indicators (Hamermesh, 2020; Del Boca et al., 2020; Gimenez-Nadal et al., 2020a), but also analyze other time uses that may be affected by teleworking. We observe that teleworking is related to the instant enjoyment levels obtained during non-paid work (unpaid work and leisure) activities. Third, our analysis reveals gender differences in how telework may impact workers' instant enjoyment

The remainder of the paper is structured as follows. Section 2 describes the data and the variables used in the analysis. Section 3 describes the relationship between telework, on the one hand, and paid work, unpaid work, and leisure, on the other. Section 4 compares the instant enjoyment experienced while doing these activities, and the differences in that enjoyment between commuters and teleworkers. Finally, Section 5 concludes.

2. Data and variables

We use the UK Time Use Survey (UKTUS), for the years 2014-2015. The UKTUS is the official time use survey of the UK (Gershuny and Sullivan, 2017), and provides socio-economic and time use information covering respondents' activities during the 24 hours of the day, from 4 am to 4 am of the next day.[1] Time use diaries produce more accurate estimates than surveys based

[1] Among respondent households, all the household members aged 8 and older are interviewed, being asked to complete two time use diaries on two different days (a weekday and a weekend).

on stylized questionnaires (Bonke, 2005; Yee-Kan, 2008) and thus have become the gold standard in the analysis of individual daily behaviors (see Harms et al., 2019).

The UKTUS allows us to define several categories of workers' uses of time. For our analysis, we focus on episodes of paid work, leisure, and unpaid work. We define paid work activities as activities including "paid work, main job", "second or other job", "travel as part of work" (excluding commuting time), "work breaks", and "other time at workplace". We follow the definition of teleworking from Gimenez-Nadal et al., (2020b), and define a dummy variable that takes value 1 for those individuals who report not having commuted to/from work on their working days, and value 0 otherwise.[2] For leisure and unpaid work time, we follow the definition of Aguiar and Hurst (2007) and Gimenez-Nadal and Sevilla (2012). Leisure includes activities such as watching TV, sports, out-of-home leisure, gardening, pet care, socializing, and so on. Unpaid work time, or household work, is defined as those activities related to household chores and domestic activities (cooking, setting the table, washing, cleaning, laundry, ironing, clothing, repair, etc.).

Additionally, the UKTUS includes information on enjoyment ratings of all episodes in the diary, intended to compute the instantaneous well-being experienced by individuals in their daily activities (i.e., hedonic feelings). In this sense, the day after the diary day (following the "day reconstruction method", Kahneman et al., 2004; Kahneman and Krueger, 2006), respondents provide a value, for each activity, to the following question: "How much did you enjoy this time?", taking values from 1 ("not at all") to 7 ("very much").

We restrict the sample to workers who filled-in their diaries on working days, defined as those days when workers spent 60 or more minutes in paid work activities (excluding commuting). This restriction excludes from the sample those individuals not in paid work, as we retain only employed individuals who worked on the diary day. To minimize the role of time allocation decisions over the life cycle, we restrict the sample to individuals between 21 and 65

[2] We used three alternative definitions of teleworkers, exploiting the information available in the UKTUS regarding where activities take place. Thus, the first alternative definition defines teleworkers as those individuals who do some paid work at home. The second identifies teleworkers as those who spend at least 1 hour doing paid work at home. The third definition identifies teleworkers as those who do all their paid work at home. Table A1 in the Appendix summarizes all the definitions of teleworkers used in the analysis. Results are qualitatively similar for the default identification of teleworkers (i.e., zero commuting time), and for the three alternative definitions, suggesting that the analyzed differences between home-based workers and commuters do not strongly depend on the definition used in the analysis.

years old (consistent with Aguiar and Hurst, 2007; Gimenez-Nadal and Sevilla, 2012). Finally, we omit individuals with missing information for any of the relevant variables, as is standard practice. The analysis is then performed at the episode level, which leaves a sample of 23,274 episodes of paid work, 12,686 episodes of unpaid work, and 18,981 episodes of leisure. These episodes correspond to 3,076 individuals, of whom 1,567 are women, and 1,509 are men.

The UKTUS data allow us to define additional control variables at the individual level, including: the gender of respondents, age, formal education, native status, marital status, household composition (the number of family unit members, and the number of children), and employment status (identifying self-employed workers, and full-time workers). For education, we define three dummies in terms of the maximum level of formal education completed: primary education, secondary education, and University education. Finally, the UKTUS allows us to define dummies identifying the following regions: "North East", "North West & Merseyside", "Yorkshire & Humberside", "East midlands", "West midlands", "East of England", "London", "South East", "South West", "Wales", "Scotland", and "Northern Ireland".

2.1 Descriptive evidence

Table 1 shows summary statistics of episode variables, for male and female commuters and teleworkers, along with *p*-values for the differences between commuters and teleworkers. All the statistics are computed using sample weights defined at the episode level, provided by the UKTUS survey. Focusing on paid work episodes, the average female commuter does 7.5 episodes of paid work per day, with the average episode lasting about 102.2 minutes, and reporting an average enjoyment of 4.0 out of 7. On the other hand, female teleworkers report 6.3 episodes of paid work per day, with an average duration of 70.7 minutes, and an average enjoyment during these episodes of 3.7 out of 7. Differences between commuters and teleworkers in these variables are all statistically significant at standard levels. This indicates that female commuters do more and longer paid work episodes per day than female teleworkers, and the enjoyment experienced during these activities is reported to be higher among commuters than among teleworkers. On the other hand, among males, commuters (teleworkers) do 7.6 (7.9) episodes of paid work per day, with the difference between them not being significant at standard levels. However, the average duration of a paid work episode among commuters is 112.6 minutes, vs 80.8 minutes among teleworkers, with this difference being highly significant. The

average enjoyment associated with paid work activities is greater among male teleworkers than among male commuters (4.1 vs 3.6, out of 7, respectively), suggesting that male teleworkers work shorter periods and enjoy these periods more than their commuter counterparts.

Regarding the episodes of housework, or unpaid work, Table 1 shows that female commuters do 5.0 episodes of unpaid work per day, lasting on average 18.0 minutes, and with an associated enjoyment level of 3.9 out of 7. Female teleworkers, on the other hand, do 7.0 episodes of unpaid work per day, with an average duration of 26.0 minutes, and an equal experienced enjoyment of 3.9. Differences in the number of periods and the average duration of periods are significant at standard levels, suggesting that female teleworkers do more and longer episodes of unpaid work, compared to female commuters in the sample. However, the difference between commuters and teleworkers in terms of the enjoyment associated with unpaid work episodes is not statistically significant at standard levels. For males, results are quite similar, as male commuters do 2.6 episodes of unpaid work per day, lasting on average 14.4 minutes, vs 3.9 episodes of 20.3 minutes, on average, for male teleworkers, with differences being statistically significant. However, male teleworkers seem to enjoy more their unpaid work activities than do male commuters, with average enjoyment rates of 3.8 among teleworkers and 3.2 among commuters, with the difference being highly significant.

Focusing on leisure activities, female commuters (teleworkers) have 6.1 (7.3) episodes of leisure per day, with each period lasting on average 37.1 (39.4) minutes. Furthermore, the average enjoyment of these episodes is 4.9 and 4.8 for commuters and teleworkers, respectively. Differences in these magnitudes are significant only for the number of periods of leisure, suggesting that female teleworkers have more episodes of leisure, but neither the duration nor the experienced enjoyment of these episodes differ between commuters and teleworkers. For males, on the other hand, commuters have 5.8 episodes of leisure per day, lasting on average 40.4 minutes, and reporting an average enjoyment of 4.6 out of 7. For male teleworkers, the average number of leisure episodes per day is 5.6, the average duration of each of these episodes is 44.5, and the average enjoyment experienced is 2.3 out of 7. Differences between commuters and teleworkers are significant in the number of leisure episodes, suggesting that male teleworkers have more leisure episodes than their commuter counterparts, but also in the enjoyment experienced, which suggests that male teleworkers enjoy their leisure episodes less

than do male commuters. The difference in the average duration of leisure episodes is not significant at standard levels.

Table 2 shows summary statistics of the main variables defined at the individual level, for male and female commuters and teleworkers in the sample, including p-values for the differences. Focusing on the daily minutes spent on these activities, the average paid work time of female commuters (teleworkers) is 436.5 (310.5) minutes per day, while the corresponding average for males is 489.9 (403.7) minutes per day. The difference between commuters and teleworkers is statistically significant at standard levels for both women and men ($p < 0.001$), suggesting that teleworkers spend less time in paid work activities than do commuters (126 fewer minutes, and 86.2 fewer minutes, among women and men, respectively). This difference seems consistent with opposite-direction differences between commuters and teleworkers in unpaid work time, and in leisure time. Female commuters spend every day, on average, 89.6 minutes in unpaid work activities, and 182.8 minutes in leisure activities, vs 148.7 and 231.1 minutes spent in those activities by teleworkers. These differences are statistically significant at standard levels ($p < 0.001$). Among males, commuters spend, on average, 45.7 minutes in unpaid work, and 198.8 minutes in leisure, vs 82.1 and 254.7 minutes spent in unpaid work and leisure by teleworkers. Differences between male commuters and male teleworkers are also statistically significant ($p < 0.001$).

3. Teleworker and worker time allocations

The first objective of the analysis is to compare the time allocation decisions of female and male teleworkers and commuters, and thus explore how these workers distribute their available time throughout their working days. One could anticipate the impact of confinements and other measures encouraging telework, in a health crisis such as Covid-19. Differences shown in Tables 1 and 2 represent only raw differences between commuters and teleworkers, and it is possible that certain worker attributes, such as socio-demographics, regional characteristics, and labor-related factors, may be driving these results. To partially overcome this issue, in this section we propose an empirical analysis, resembling that in Gimenez-Nadal et al. (2020b) for the case of the US, to study the differences in the amount of time spent by male and female teleworkers and commuters in paid work, unpaid work, and leisure activities, net of observable characteristics.

For a given individual *i*, consider that W_i is the time spent by worker *i* in the reference activity. We then estimate, by Ordinary Least Squares (OLS), the following equations:

$$\log(1 + Act_i) = \beta_0 + \beta_1 T_i + \beta_2 X_i + \alpha + \varepsilon_i, \quad (1)$$

where T_i is a dummy variable taking value 1 if *i* is a teleworker, 0 otherwise; X_i is a vector of individual-level controls, α represents region fixed effects, and ε_i is the error term. The dependent variable is defined in logarithms in order to interpret the estimated coefficients in percentage levels (i.e., elasticities). We sum 1 to avoid problems computing logarithms for individuals reporting no unpaid work time, or no leisure time.[3] All the equations are estimated separately for female and male workers, and estimates include sample weights provided by the UKTUS survey, as well as robust standard errors. Table A2 in the Appendix shows similar estimates using the alternative identification of teleworkers. Results are qualitatively similar.

Columns (1) and (2) of Table 3 show estimates on paid work time for women and men, respectively. The results suggest that, net of observed characteristics, female teleworkers spend about 50.6 percent less time than do similar commuters. Among males, teleworkers spend on paid work about 34.3 percent less time than commuters, net of observed heterogeneity. These results are consistent with the descriptive results shown in Tables 1 and 2, suggesting that female and male teleworkers work fewer hours than their commuter counterparts. Furthermore, these percentages correspond to 220.9 fewer minutes for females, and 106.5 fewer minutes for males, with differences between women and men being statistically significant at standard levels, according to a t-type test ($p = 0.028$). Thus, it seems that the conditional correlation between being a teleworker, and paid work time, is greater for women than for men.

Columns (3) and (4) of Table 3 show estimates on unpaid work time for women and men. Among female workers, being a teleworker is associated with a statistically significant increase

[3] The sample is restricted to individuals devoting more than 60 minutes to paid work, while there may be individuals in the sample reporting 0 minutes of leisure or unpaid work time. Specifically, 431 individuals in the sample report 0 minutes of unpaid work, while 89 individuals report 0 leisure time. Given that we are actually observing individuals reporting zero unpaid work and zero leisure, an alternative would have been to estimate censored or truncated regressions, such as Tobit models (Tobin, 1958). Nevertheless, prior research has shown that OLS and Tobit models produce similar estimates when studying time allocation decisions (Frazis and Stewart, 2012; Gershuny, 2012; Foster and Kalenkoski, 2013). Additionally, these models are appropriate when variables are censored, and working on time use data such censoring implies that individuals may want to spend less-than-zero minutes in activities. By assuming that no one can spend negative time in leisure and unpaid work, censoring is no longer needed, and then OLS and Tobit should give equivalent answers. Therefore, we have decided to rely on OLS estimates, as is common in the literature.

in unpaid work time of about 46.5 percent, which corresponds to teleworkers doing, on average, about 41.7 more minutes per day of unpaid work activities than a similar commuter. The average male teleworker, on the other hand, does 63.3 percent more unpaid work than the similar commuter, representing 28.9 more minutes, and indicating that being a teleworker is correlated with more unpaid work time. The relative difference (the difference in percentage) between commuters and teleworkers is greater for males than for females, although it is not statistically significant, according to a *t*-type test ($p = 0.308$), while the raw difference in minutes is estimated to be quantitatively larger for women than for men.

Finally, Columns (5) and (6) of Table 3 show the results of estimating Equation (1) on leisure time. The estimates reveal a positive and statistically significant correlation between being a teleworker, and the time spent in leisure activities. Among females, the difference is about 26.2 percent more leisure time for teleworkers, with the estimated coefficient being highly significant. For men, on the other hand, the coefficient is statistically significant only at the 90% level, indicating that male teleworkers spend 20.2 percent more time in leisure activities than do similar commuters. These differences represent a gap between teleworkers and commuters of about 47.9 minutes for females, and 40.2 minutes for males, net of observable characteristics.[4]

4. Telework and worker instant enjoyment

We now analyze the instant enjoyment experienced by individuals while doing paid work, unpaid work, and leisure activities, with a focus on the differences between commuters and teleworkers. we want to determine whether policies encouraging or suggesting teleworking under different settings, such as confinements, may influence workers' well-being. To that end, we estimate OLS models, for female and male workers, for a given individual *i*, and episode *j*, as follows;

$$E_{ij} = \alpha_0 + \alpha_1 T_i + \alpha_2 X_i + \alpha_3 P_{ij} + \alpha + \varepsilon_{ij}, \quad (2)$$

[4] For the shake of brevity, we only describe the main coefficients of interest. For the same reason, we do not show the analysis of the timing of paid work, unpaid work, and leisure, analyzed as the rate of teleworkers and commuters doing the corresponding activities during the 24 hours of the day (Hamermesh, 1999). Table A3 in the Appendix shows the rate of female and male commuters and teleworkers doing these activities, by the hour of the day (divided in 24 1-hour time bands). The results show that there are more commuters than teleworkers working during standard work hours (e.g., 8am to 4pm), and opposite trends in terms of leisure and childcare. Results are mostly analogous to those in Gimenez-Nadal et al. (2020b) for the US.

where T_i, X_i, and α are defined as in Equation (1), and ε_{ij} is the error term. The dependent variable, E_{ij}, is the enjoyment reported by individual *i* while doing the activity reported in period *j*, and P_{ij} is a vector of episode-level controls. This vector includes dummies for the time band in which period *j* began, the duration of period *j*, and two dummies capturing whether the spouse was present (value 1, 0 otherwise), or whether a household child was present (value 1; 0 otherwise), during period *j*. Equation (2) is estimated separately for episodes of paid work, unpaid work, and leisure time. All the estimates include sample weights at the episode level, provided by the UKTUS survey. Standard errors are clustered at the individual level to take into account the heterogeneity of time allocation decisions as well as inter-personal differences in scales (Ferrer-i-Carbonell and Frijters, 2004). Table A4 in the Appendix shows similar estimates using the alternative identifications of teleworkers.

Columns (1) and (2) of Table 4 show estimates of Equation (2) for the episodes of paid work. Focusing on the main explanatory variable of interest, estimates show that, for female workers, teleworking is negatively correlated to the enjoyment experienced while doing paid work. The corresponding coefficient is statistically significant at standard levels, indicating that female teleworkers experience less enjoyment while doing paid work than do female commuters. Among males, estimates show a not statistically significant difference for teleworking in the experienced enjoyment associated with paid work episodes.

Regarding episode characteristics, the duration of the paid work episode is negatively correlated with the experienced enjoyment. The presence of the (married or unmarried) couple is not significant for females, but positive and highly significant for males, suggesting that males enjoy the paid work episode more when teleworking if the couple is present at that moment. Conversely, the presence of a child is positive and highly significant for females, but negative and significant for males, indicating that female workers enjoy their paid work episodes more when teleworking if their child (children) is (are) present, while the opposite applies to males.[5]

Columns (3) and (4) of Table 4 show the results of estimating Equation (2) on the episodes of unpaid work. Teleworking is also negatively correlated with the enjoyment experienced while doing unpaid work for females, with the coefficient being statistically significant at standard levels, and is lower for female teleworkers, than for female commuters. Among males, estimates

[5] Estimates associated with the individual-level controls are available upon request.

show no differences for teleworking in the experienced enjoyment when doing unpaid work activities.

For the episode characteristics, the duration of the unpaid work episodes is not statistically significant among female workers, indicating that the enjoyment experienced does not depend on the duration of the unpaid work episodes. However, among males, the duration of unpaid work episodes shows a negative and highly significant correlation with the experienced enjoyment while doing these activities. The presence of the couple is positive and statistically significant for females, but not significant for males, while the presence of a child is positive and statistically significant for both females (at the 99% level) and males (at the 90% level).

Columns (5) and (6) of Table 4 show the results of estimating Equation (2) on leisure episodes. Among females, the estimated coefficient associated with the dummy identifying teleworking is not statistically significant at standard levels, indicating that the experienced enjoyment while doing leisure activities is similar for female teleworkers in comparison to commuters. However, among males, there is a positive and statistically significant correlation between teleworking, and the enjoyment experienced during leisure, indicating that male workers enjoy their leisure episodes more if they are able to telework, net of individual and episode observable characteristics.

The duration of the leisure episodes is not significant among females, but positive and statistically significant among males. Thus, it seems that the enjoyment experienced during leisure does not depend on the duration of the activity for females, while males get more enjoyment from longer episodes of leisure. The presence of the couple is positive and highly significant for both males and females, indicating that doing joint leisure is preferable to other forms of leisure, in line with Cosaert et al. (2020) and Hamermesh (2020). The presence of a child is positive and highly significant for females, but not significant for males, and female workers seem to enjoy their leisure activities more in the presence of a child, while males are indifferent to the presence of the child, in terms of the enjoyment experienced.

5. Conclusions

This paper explores how teleworking relates to workers' time allocation decisions on workdays, and the instant enjoyment experienced, with a focus on differences between women and men.

Using the UK Time Use Survey for the years 2014-2015, the results show that telework is associated with a cut in paid work time for both, and is associated with increased unpaid work and leisure times, with these differences being statistically significant, and quantitatively relevant. Additionally, the cut in paid work time associated with teleworking is greater for women than for men, revealing a potential gender difference in the impact of lockdowns on households, in line with Del Boca et al. (2020) and Sevilla and Smith (2020). Furthermore, the results also show that teleworking relates to a decrease in women's, but not men's, experienced enjoyment while working in the labor market and in the household. On the other hand, teleworking for men is related to greater enjoyment during leisure activities. These opposite effects for women and men suggest that promoting teleworking may impact men and women differently, producing intrahousehold imbalances by increasing enjoyment for one while decreasing enjoyment for the other.

The empirical analysis has certain limitations. First, the identification of teleworkers is not standard in the literature. We follow a similar definition as in Gimenez-Nadal et al. (2020b), and also run some robustness checks with alternative definitions, but we must acknowledge measurement error. Second, the data is cross-sectional, and thus all the analysis is limited to conditional correlations only, as we cannot account for reverse causality and endogeneity. Thus, the results cannot be interpreted as showing causal links, but only correlations, net of observable factors. Third, as we do not yet have time use diaries collected during lockdowns, the results should be extrapolated. Hence, conclusions should be taken with caution.

Despite these limitations, the results shown in this paper are important for society, especially in a period of health uncertainty, such as the continuing Covid-19 global crisis, which may entail months of lockdown, where home-based work becomes more relevant for workers and employers, and also policy makers, beyond purely speculative claims. The results are relevant for workers, as being a teleworker has traditionally been associated with decreased work-family conflicts, as individuals who are able to telework seem to be able to spend more time in unpaid work activities during the day and, particularly, during regular working hours. However, our results suggest that women may experience a decrease in their daily enjoyment while teleworking.

For firms, the results reveal decreased working hours associated with teleworking and home-based workers, although the literature is not clear about whether this leads to decreased productivity (Ross and Zenou, 2008; van Ommeren and Gutiérrez-i-Puigarnau, 2011; Bloom et

al., 2015; Gimenez-Nadal et al., 2020b). Further research should investigate whether or not teleworkers are more productive than commuters. Finally, the results are important for planners and policy makers, who must regulate telework, and create policies associated with home-based working in general terms, but also in periods of lockdown and confinement, as has happened in recent months, since the onset of the Covid-19 pandemic.

References

Aguiar, M., & Hurst, E. (2007). Measuring trends in leisure: The allocation of time over five decades. Quarterly Journal of Economics, 122(3), 969-1006.

Alon, T. M., Doepke, M., Olmstead-Rumsey, J., & Tertilt, M. (2020). The impact of COVID-19 on gender equality. NBER Wp No. w26947.

Biroli, P., Bosworth, S., Della Giusta, M., Di Girolamo, A., Jaworska, S., & Vollen, J. (2020). Family life in lockdown. IZA DP 13398.

Bloom, N., Liang, J., Roberts, J., & Ying, Z. J. (2015). Does working from home work? Evidence from a Chinese experiment. The Quarterly Journal of Economics, 130(1), 165-218.

Bonke, J. (2005). Paid work and unpaid work: Diary information versus questionnaire information. Social Indicators Research, 70(3), 349-368.

Campaña, J.C., Giménez-Nadal, J.I. & Molina, J.A. (2020). Self-employed and employed mothers in Latin American families: are there differences in paid-work, unpaid work and child care?. Journal of Family and Economic Issues, 41, 52-69.

Cosaert, S., Theloudis, A., & Verheyden, B. (2020). Togetherness in the Household. Luxembourg Institute of Socio-Economic Research (LISER) Working Paper Series, 1.

Del Boca, D., Oggero, N., Profeta, P., & Rossi, M. (2020). Women's and men's work, housework and childcare, before and during COVID-19. Review of Economics of the Household, 18, 1001-1017.

Dockery, A. M., & Bawa, S. (2018). When two worlds collude: Working from home and family functioning in Australia. International Labour Review, 157(4), 609-630.

Edwards, L. N., & Field-Hendrey, E. (2002). Home-based work and women's labor force decisions. Journal of Labor Economics, 20(1), 170-200.

Foster, G., & Kalenkoski, C. M. (2013). Tobit or OLS? An empirical evaluation under different diary window lengths. Applied Economics, 45(20), 2994-3010.

Ferrer-i-Carbonell, A., & Frijters, P. (2004). How important is methodology for the estimates of the determinants of happiness? The Economic Journal, 114(497), 641-659.

Frazis, H., & Stewart, J. (2012). How to think about time-use data: What inferences can we make about long-and short-run time use from time diaries? Annals of Economics and Statistics, 105/106, 231-245.

Gershuny, J. (2012). Too many zeros: A method for estimating long-term time-use from short diaries. Annals of Economics and Statistics, 105/106, 247-270.

Gershuny, J., & Sullivan, O. (2017). United Kingdom Time Use Survey, 2014-2015. Centre for Time Use Research, University of Oxford. [data collection]. UK Data Service. SN: 8128.

Gershuny, J., Sullivan, O., Sevilla, A., Vega-Rapun, M., Foliano, F., de Grignon, J., Harms, T., & Walthery, P. (2020). A new perspective from time use research on the effects of lockdown on COVID-19 behavioral infection risk. IZA DP 13599.

Gimenez-Nadal, J.I., Molina, J.A. & Velilla, J. (2020a). Should we cheer together? Gender differences in instantaneous well-being during joint and solo activities. IZA DP 13306.

Gimenez-Nadal, J.I., Molina, J.A. & Velilla, J. (2020b). Work time and well-being for workers at home: Evidence from the American Time Use Survey. International Journal of Manpower, 41(2), 184-206.

Gimenez-Nadal, J. I., & Sevilla, A. (2012). Trends in time allocation: A cross-country analysis. European Economic Review, 56(6), 1338-1359.

Golden, L. (2008). Limited access: Disparities in flexible work schedules and work-at-home. Journal of Family and Economic Issues, 29(1), 86-109.

Golden, T. D., & Fromen, A. (2011). Does it matter where your manager works? Comparing managerial work mode (traditional, telework, virtual) across subordinate work experiences and outcomes. Human Relations, 64(11), 1451-1475.

Hamermesh, D. S. (1999). The timing of work over time. The Economic Journal, 109(452), 37-66.

Hamermesh, D. S. (2020). Life satisfaction, loneliness and togetherness, with an application to Covid-19 lock-downs. Review of Economics of the Household, 18, 983-1000.

Harms, T., Berrigan, D., & Gershuny, J. (2019). Daily metabolic expenditures: Estimates from US, UK and polish time-use data. BMC Public Health, 19(S2), 453-465.

Kahneman, D., & Krueger, A. B. (2006). Developments in the measurement of subjective well-being. Journal of Economic Perspectives, 20(1), 3-24.

Kahneman, D., Krueger, A. B., Schkade, D. A., Schwarz, N., & Stone, A. A. (2004). A survey method for characterizing daily life experience: The day reconstruction method. Science, 306(5702), 1776-1780.

Mangiavacchi, L., Piccoli, L., & Pieroni, L. (2020). Fathers Matter: Intra-Household Responsibilities and Children's Wellbeing during the COVID-19 Lockdown in Italy. IZA DP 13519.

Molina, J.A. (2020a). The Work-Family Conflict: Evidence from the recent decade and lines of future research. Journal of Family and Economic Issues, forthcoming. DOI: 10.1007/s10834-020-09700-0.

Molina, J.A. (2020b). Family and entrepreneurship: new empirical and theoretical results. Journal of Family and Economic Issues, 41, 1-3.

Morganson, V. J., Major, D. A., Oborn, K. L., Verive, J. M., & Heelan, M. P. (2010). Comparing telework locations and traditional work arrangements. Journal of Managerial Psychology.

Peters, P., & van der Lippe, T. (2007). The time-pressure reducing potential of telehomeworking: The Dutch case. The International Journal of Human Resource Management, 18(3), 430-447.

Rhee, H. J. (2008). Home-based telecommuting and commuting behavior. Journal of Urban Economics, 63(1), 198-216.

Ross, S. L., & Zenou, Y. (2008). Are shirking and leisure substitutable? An empirical test of efficiency wages based on urban economic theory. Regional Science and Urban Economics, 38(5), 498-517.

Safirova, E. (2002). Telecommuting, traffic congestion, and agglomeration: a general equilibrium model. Journal of Urban Economics, 52(1), 26-52.

Sevilla, A., & Smith, S. (2020). Baby steps: The gender division of childcare during the COVID19 pandemic. CEPR DP 14804.

Tobin, J. (1958). Estimation of relationships for limited dependent variables. Econometrica, 26(1), 24-36.

Van Ommeren, J.N., & Gutiérrez-i-Puigarnau, E. (2011), Are workers with a long commute less productive? An empirical analysis of absenteeism. Regional Science and Urban Economics, 41(1), 1-8.

Wight, V. R., & Raley, S. B. (2009). When home becomes work: Work and family time among workers at home. Social Indicators Research, 93(1), 197.

Yee-Kan, M. (2008). Measuring housework participation: The gap between "stylised" questionnaire estimates and diary-based estimates. Social Indicators Research, 86(3), 381-400.

Table 1. Summary statistics of episode variables

	FEMALES					MALES				
	Commuters		Teleworkers		Diff	Commuters		Teleworkers		Diff
VARIABLES	Mean	S.D.	Mean	S.D.	*p*-value	Mean	S.D.	Mean	S.D.	*p*-value
Paid work episodes per day	7.520	6.362	6.328	5.610	(0.006)	7.618	6.561	7.869	7.175	(0.614)
Duration of paid work episodes	102.199	97.676	70.703	56.976	(<0.001)	112.608	105.350	80.809	71.059	(<0.001)
Enjoyment of paid work episodes	4.049	2.082	3.721	2.048	(0.010)	3.634	2.178	4.093	2.003	(0.003)
No. of paid work episodes	10,388		1,204			9,924		1,758		
Unpaid work episodes per day	5.000	4.015	7.048	5.208	(<0.001)	2.581	2.760	3.892	3.922	(<0.001)
Duration of unpaid work episodes	17.995	14.377	26.029	36.189	(<0.001)	14.384	15.057	20.345	19.462	(<0.001)
Enjoyment of unpaid work episodes	3.857	2.368	3.891	2.178	(0.446)	3.171	2.681	3.805	2.402	(<0.001)
No. of unpaid work episodes	6,973		1,399			3,409		905		
Leisure episodes per day	6.118	4.488	7.297	4.554	(0.002)	5.846	4.165	7.241	5.610	(<0.001)
Duration of leisure episodes	37.086	31.872	39.396	37.947	(0.482)	40.390	29.812	44.478	38.252	(0.455)
Enjoyment of leisure episodes	4.878	2.420	4.818	2.376	(0.338)	4.590	2.600	4.944	2.272	(0.069)
No. of leisure episodes	8,364		1,382			7,617		1,618		

Note: The sample (UKTUS 2015) is restricted to episodes of paid work, unpaid work, and leisure of employees who filled in their diaries on working days. T-type test *p*-values, for the difference between commuters and teleworkers, in parentheses.

Table 2. Summary statistics of individual variables

	Commuters		Teleworkers		Diff.
VARIABLES	Mean	S.D.	Mean	S.D.	*p*-value
A) FEMALES					
Paid work time	436.454	145.819	310.502	198.327	(<0.001)
Unpaid work time	89.644	73.494	148.738	110.477	(<0.001)
Leisure time	182.835	113.311	231.067	133.992	(<0.001)
No. individuals	1,373		194		
B) MALES					
Paid work time	489.905	132.501	403.671	219.778	(<0.001)
Unpaid work time	45.680	56.823	82.114	87.794	(<0.001)
Leisure time	198.823	121.587	254.699	150.889	(<0.001)
No. individuals	1,288		221		

Note: The sample (UKTUS 2015) is restricted to employees who filled in their diaries on working days. "Paid work time", "unpaid work time", and "leisure time" are measured in minutes per day. Additional summary statistics shown in Table A5 in the Appendix. T-type test *p*-values, for the difference between commuters and teleworkers, in parentheses.

Table 3. Estimates on worker time allocations

	(1)	(2)	(3)	(4)	(5)	(6)
	PAID WORK TIME		UNPAID WORK TIME		LEISURE TIME	
VARIABLES	Women	Men	Women	Men	Women	Men
Being a teleworker	-0.506***	-0.343***	0.465***	0.633***	0.262***	0.202*
	(0.054)	(0.051)	(0.105)	(0.128)	(0.079)	(0.105)
Age	0.008	0.000	0.060***	0.095***	0.015	0.017
	(0.007)	(0.006)	(0.020)	(0.027)	(0.014)	(0.016)
Age squared	-0.001	-0.000	-0.004*	-0.008***	-0.001	-0.001
	(0.001)	(0.001)	(0.002)	(0.003)	(0.002)	(0.002)
Secondary education	0.031	-0.049	0.339	0.146	-0.215**	-0.057
	(0.056)	(0.046)	(0.225)	(0.214)	(0.105)	(0.127)
University education	0.101*	-0.063	0.253	0.383*	-0.355***	-0.097
	(0.058)	(0.048)	(0.230)	(0.215)	(0.115)	(0.123)
Immigrant	0.020	-0.029	0.020	-0.251	-0.136	0.046
	(0.041)	(0.044)	(0.125)	(0.164)	(0.102)	(0.099)
UK citizen	0.037	-0.039	-0.099	-0.013	0.004	0.223*
	(0.041)	(0.044)	(0.135)	(0.189)	(0.104)	(0.134)
Married and living with	0.018	-0.004	0.093	-0.330***	-0.035	-0.074
	(0.025)	(0.024)	(0.085)	(0.110)	(0.060)	(0.080)
Number of family unit members	-0.005	0.005	-0.122***	-0.062	-0.066*	-0.051
	(0.011)	(0.012)	(0.045)	(0.049)	(0.035)	(0.040)
Number of children aged 0-4	-0.005	0.010	-0.028	0.144	-0.139**	-0.174**
	(0.030)	(0.026)	(0.090)	(0.103)	(0.068)	(0.071)
Number of children	-0.023	0.001	0.188***	0.115	-0.019	0.042
	(0.019)	(0.021)	(0.067)	(0.080)	(0.047)	(0.055)
Employee in the public sector	-0.021	0.034	-0.045	0.006	0.009	-0.047
	(0.034)	(0.038)	(0.098)	(0.150)	(0.073)	(0.110)
Part time worker	-0.172***	-0.086*	0.262***	0.061	0.062	-0.098
	(0.037)	(0.050)	(0.101)	(0.202)	(0.074)	(0.152)
Net monthly earnings	0.004**	-0.003	0.001	-0.004	-0.001	0.003
	(0.002)	(0.002)	(0.004)	(0.007)	(0.005)	(0.003)
Hours usually worked per week	0.007***	0.007***	-0.006	-0.010*	-0.009***	-0.015***
	(0.002)	(0.002)	(0.005)	(0.006)	(0.003)	(0.005)
Constant	5.513***	6.118***	3.219***	0.677	5.485***	4.715***
	(0.193)	(0.160)	(0.529)	(0.784)	(0.373)	(0.578)
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,567	1,509	1,567	1,509	1,567	1,509
R-squared	0.267	0.156	0.121	0.079	0.066	0.058

Note: The sample (UKTUS 2015) is restricted to employees who filled in their diaries on working days. Robust standard errors in parentheses. The dependent variables are the log-of-minutes spent in paid work (Columns (1-2)), unpaid work (Columns (3-4)), and leisure (Columns (5-6)). Teleworkers are defined as those workers devoting zero minutes to commuting to/from work. * Significant at the 90%; ** significant at the 95%; *** significant at the 99%.

Table 4. Estimates on experienced enjoyment

	(1)	(2)	(3)	(4)	(5)	(6)
	PAID WORK EPISODES		UNPAID WORK EPISODES		LEISURE EPISODES	
VARIABLES	Women	Men	Women	Men	Women	Men
Being a teleworker	-0.458***	0.099	-0.267***	0.091	-0.097	0.504***
	(0.092)	(0.074)	(0.092)	(0.115)	(0.100)	(0.089)
Episode duration	-0.002***	-0.002***	-0.003	-0.006**	-0.000	0.003***
	(0.000)	(0.000)	(0.002)	(0.003)	(0.001)	(0.001)
With: Spouse	-0.163	0.529***	0.413***	0.136	0.394***	0.371***
	(0.166)	(0.162)	(0.080)	(0.106)	(0.077)	(0.079)
With: Child	0.801***	-1.189***	0.539***	0.288*	0.634***	-0.123
	(0.273)	(0.377)	(0.116)	(0.162)	(0.137)	(0.139)
Constant	7.574***	3.299***	4.325***	2.731***	4.513***	3.733***
	(0.467)	(0.486)	(0.571)	(0.795)	(0.607)	(0.656)
Socio-demographics	Yes	Yes	Yes	Yes	Yes	Yes
Family controls	Yes	Yes	Yes	Yes	Yes	Yes
Labor controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Starting time FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11,592	11,682	8,372	4,314	9,746	9,235
R-squared	0.039	0.064	0.045	0.068	0.037	0.078

Note: The sample (UKTUS 2015) is restricted to episodes of paid work (Columns (1-2)), unpaid work (Columns (3-4)), and leisure (Columns (5-6)) of employees who filled in their diaries on working days. Robust standard errors in parentheses. The dependent variable is the enjoyment experience while doing paid work activities (Columns (1-2)), unpaid work activities (Columns (3-4)), and leisure activities (Columns (5-6)). Teleworkers are defined as those workers devoting zero minutes to commuting to/from work. * Significant at the 90%; ** significant at the 95%; *** significant at the 99%.

Appendix A: Additional results

Table A1. Definitions of teleworkers

	Frequency	Percent
Default definition of teleworkers:		
Individuals reporting zero commuting	415	13.49%
Alternative definitions of teleworkers:		
Some paid work at home	440	14.30%
More than 1 hour of paid work at home	342	11.12%
All the paid work at home	184	5.98%
N. of individuals	3,076	

Note: The sample (UKTUS 2015) is restricted to employees who filled in their diaries on working days.

Table A2. Additional estimates on worker time allocations

	(1)	(2)	(3)	(4)	(5)	(6)
	PAID WORK TIME		UNPAID WORK TIME		LEISURE TIME	
VARIABLES	Women	Men	Women	Men	Women	Men
PANEL A						
Doing some telework	-0.252***	-0.291***	0.334***	0.408***	0.126	0.143
	(0.051)	(0.054)	(0.100)	(0.143)	(0.080)	(0.107)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,567	1,509	1,567	1,509	1,567	1,509
R-squared	0.188	0.131	0.117	0.069	0.062	0.056
PANEL B						
Doing at least 1h of telework	-0.355***	-0.356***	0.378***	0.519***	0.241***	0.084
	(0.061)	(0.065)	(0.112)	(0.157)	(0.079)	(0.135)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,567	1,509	1,567	1,509	1,567	1,509
R-squared	0.205	0.140	0.117	0.071	0.065	0.055
PANEL C						
Full telework	-0.788***	-0.713***	0.726***	1.103***	0.522***	0.718***
	(0.074)	(0.090)	(0.124)	(0.160)	(0.091)	(0.087)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,567	1,509	1,567	1,509	1,567	1,509
R-squared	0.297	0.212	0.124	0.082	0.073	0.072

Note: The sample (UKTUS 2015) is restricted to employees who filled in their diaries on working days. Robust standard errors in parentheses. The dependent variables are the log-of-minutes spent doing paid work (Columns (1-2)), unpaid work (Columns (3-4)), and leisure (Columns (5-6)). Teleworkers are defined as those workers who do some paid work at home (Panel A); those workers who do at least 1 hour of paid work at home (Panel B); or those workers who do all their paid work at home (Panel C). Additional coefficients are available upon request. * Significant at the 90%; ** significant at the 95%; *** significant at the 99%.

Table A3. Rate of individuals doing paid work, unpaid work, and leisure

	PAID WORK				UNPAID WORK				LEISURE			
	Females		Males		Females		Males		Females		Males	
Band starting at	Telew.	Comm.	Telew.	Comm.	Telew.	Comm.	Telew.	Comm.	Telew.	Comm.	Telew.	Comm.
4am	0.023	0.040	0.046	0.073	0.000	0.011	0.005	0.009	0.004	0.014	0.024	0.017
5am	0.035	0.047	0.082	0.081	0.017	0.034	0.013	0.034	0.028	0.027	0.024	0.034
6am	0.069	0.052	0.133	0.100	0.086	0.081	0.084	0.058	0.051	0.052	0.055	0.056
7am	0.107	0.112	0.206	0.201	0.143	0.131	0.085	0.071	0.087	0.046	0.099	0.053
8am	0.236	0.324	0.399	0.411	0.169	0.087	0.056	0.038	0.091	0.050	0.116	0.059
9am	0.353	0.569	0.532	0.643	0.169	0.074	0.093	0.027	0.138	0.061	0.081	0.044
10am	0.451	0.709	0.595	0.727	0.174	0.074	0.072	0.032	0.107	0.046	0.082	0.052
11am	0.431	0.699	0.619	0.695	0.182	0.069	0.088	0.040	0.155	0.058	0.114	0.080
12am	0.366	0.525	0.454	0.521	0.212	0.071	0.144	0.048	0.101	0.084	0.094	0.088
1pm	0.360	0.507	0.447	0.535	0.193	0.082	0.098	0.048	0.099	0.096	0.137	0.097
2pm	0.407	0.577	0.555	0.655	0.217	0.095	0.095	0.052	0.132	0.103	0.128	0.081
3pm	0.323	0.530	0.557	0.625	0.208	0.110	0.090	0.051	0.171	0.101	0.150	0.105
4pm	0.308	0.388	0.462	0.491	0.177	0.165	0.123	0.078	0.153	0.135	0.204	0.136
5pm	0.219	0.201	0.333	0.275	0.293	0.224	0.148	0.119	0.165	0.157	0.220	0.167
6pm	0.150	0.111	0.190	0.135	0.257	0.247	0.186	0.131	0.223	0.216	0.235	0.263
7pm	0.111	0.080	0.128	0.098	0.190	0.201	0.135	0.131	0.350	0.303	0.416	0.360
8pm	0.113	0.064	0.114	0.082	0.123	0.173	0.080	0.112	0.432	0.414	0.489	0.471
9pm	0.064	0.057	0.105	0.081	0.095	0.111	0.071	0.065	0.538	0.452	0.503	0.492
10pm	0.048	0.045	0.076	0.075	0.038	0.068	0.057	0.053	0.406	0.320	0.371	0.350
11pm	0.041	0.040	0.065	0.065	0.040	0.040	0.028	0.031	0.159	0.178	0.214	0.218
12pm	0.037	0.040	0.051	0.071	0.018	0.012	0.009	0.020	0.078	0.080	0.107	0.115
1am	0.045	0.040	0.051	0.069	0.000	0.008	0.009	0.019	0.000	0.031	0.032	0.048
2am	0.037	0.035	0.055	0.068	0.003	0.004	0.014	0.007	0.000	0.012	0.007	0.016
3am	0.019	0.032	0.047	0.063	0.000	0.003	0.010	0.004	0.010	0.011	0.014	0.008

Note: The sample (UKTUS 2015) is restricted to diaries of employees who filled in their diaries on working days.

Table A4. Additional estimates on experienced enjoyment

	(1)	(2)	(3)	(4)	(5)	(6)
	PAID WORK EPISODES		UNPAID WORK EPISODES		LEISURE EPISODES	
VARIABLES	Women	Men	Women	Men	Women	Men
PANEL A						
Doing some telework	-0.047	0.236***	-0.171*	0.195*	-0.089	0.642***
	(0.097)	(0.084)	(0.090)	(0.116)	(0.100)	(0.083)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11,592	11,682	8,372	4,314	9,746	9,235
R-squared	0.039	0.068	0.045	0.071	0.037	0.081
PANEL B						
Doing at least 1h of telework	-0.043	0.147	-0.129	0.249*	0.239**	0.716***
	(0.104)	(0.115)	(0.091)	(0.129)	(0.097)	(0.093)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11,592	11,682	8,372	4,314	9,746	9,235
R-squared	0.039	0.067	0.044	0.072	0.038	0.080
PANEL C						
Full telework	0.315	0.201	-0.069	0.057	0.345***	0.565***
	(0.205)	(0.173)	(0.113)	(0.159)	(0.117)	(0.113)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11,592	11,682	8,372	4,314	9,746	9,235
R-squared	0.039	0.067	0.044	0.071	0.038	0.078

Note: The sample (UKTUS 2015) is restricted to episodes of paid work (Columns (1-2)), unpaid work (Columns (3-4)), or leisure (Columns (5-6)) of employees who filled in their diaries on working days. Robust standard errors in parentheses. The dependent variable is the enjoyment experience while doing paid work activities (Columns (1-2)), unpaid work activities (Columns (3-4)), and leisure activities (Columns (5-6)). Teleworkers are defined as those workers who do some paid work at home (Panel A); those workers who do at least 1 hour of paid work at home (Panel B); or those workers who do all their paid work at home (Panel C). * Significant at the 90%; ** significant at the 95%; *** significant at the 99%.

Table A5. Additional summary statistics of individual variables

	FEMALES					MALES				
	Commuters		Teleworkers		Diff.	Commuters		Teleworkers		Diff.
VARIABLES	Mean	S.D.	Mean	S.D.	p-value	p-value	S.D.	Mean	S.D.	p-value
Age	39.616	13.264	42.050	11.115	(0.021)	39.062	12.888	40.815	12.301	(0.046)
Basic education	0.049	0.216	0.027	0.164	(0.152)	0.052	0.222	0.033	0.180	(0.157)
Secondary education	0.476	0.500	0.371	0.484	(0.008)	0.476	0.500	0.415	0.494	(0.043)
University education	0.475	0.500	0.602	0.491	(<0.001)	0.472	0.499	0.551	0.498	(0.008)
UK citizen	0.875	0.331	0.898	0.303	(0.470)	0.875	0.330	0.879	0.327	(0.711)
Married and living with	0.442	0.497	0.526	0.501	(0.008)	0.470	0.499	0.503	0.501	(0.348)
Single, never married	0.286	0.452	0.225	0.419	(0.040)	0.307	0.461	0.232	0.423	(0.023)
Number of family unit members	2.940	1.257	3.049	1.198	(0.133)	3.064	1.269	3.045	1.419	(0.983)
Number of children	0.493	0.806	0.662	0.861	(0.003)	0.552	0.891	0.678	1.010	(0.045)
Number of children aged 0-4	0.191	0.454	0.217	0.493	(0.698)	0.258	0.565	0.275	0.583	(0.844)
Dwelling: house	0.822	0.383	0.887	0.317	(0.012)	0.813	0.390	0.846	0.361	(0.471)
Number of rooms	4.622	1.682	5.099	1.771	(<0.001)	4.597	1.650	4.981	1.714	(0.003)
Tenure: Owned	0.667	0.472	0.772	0.421	(0.002)	0.638	0.481	0.708	0.456	(0.211)
Employee in the public sector	0.402	0.490	0.538	0.500	(0.001)	0.221	0.415	0.235	0.425	(0.734)
Part time worker	0.361	0.481	0.383	0.487	(0.506)	0.117	0.322	0.126	0.333	(0.669)
Hours usually worked per week	32.730	11.792	34.922	14.692	(0.006)	38.909	10.374	40.729	12.866	(0.005)
Number of cars in household	1.577	0.983	1.712	0.878	(0.019)	1.566	0.956	1.577	0.870	(0.823)
Household monthly income	5.555	39.911	4.275	5.623	(0.873)	7.217	54.803	5.085	8.822	(0.786)
Net monthly earnings	1.330	4.462	1.976	4.422	(0.036)	1.856	5.993	3.144	12.560	(0.017)
N. individuals	1,373		194			1,288		221		

Note: The sample (UKTUS 2015) is restricted to employees who filled in their diaries on working days. "Hours usually worked per week" is measured in hours per week. "Net monthly earnings" is measured in pounds per month, divided by 1,000. T-type test p-values, for the difference between commuters and teleworkers, in parentheses.